

PROPOSAL ABSTRACT

Applicant Name: **Greenway Service District**

Project Title: **Silver Bow Creek Greenway**

Project Description and Benefits to Restoration:

Funding in the amount of \$2,173,444 to plan, design and construct restoration and access improvements within the Silver Bow Creek Corridor (see Figure 1) concurrent with remedial work to be conducted in 2009. Design submittals and expenditures will correspond with progress and work plans for ongoing remedial actions.

The 2008 Greenway Service District application presents a detailed funding request for the:

- 1) Miles Crossing area stream realignment activities including additional channel restoration and floodplain grading at (see Figure 2); and
- 2) Access feature development in Subarea 3 (see Figure 2) and Reaches P, Q and R of Subarea 4 (see Figure 3).

The Miles Crossing project components will provide opportunities to enhance the restoration of Silver Bow Creek and the surrounding floodplain in the area of Miles Crossing by relocating the channel to the north of the Rarus Railway line. The realignment of Silver Bow Creek from its present channelized location between railroad embankments will benefit both remedial and restoration activities by simplifying stream channel diversion and channel reconstruction. It will also alleviate flooding impacts (flood flow depths and erosive forces) on the Rarus Railway embankment.

Companion to the proposed realignment of Silver Bow Creek at Miles Crossing (Subarea 3) and previously funded and ongoing remedial/restoration work in Subarea 4 is a funding request for the construction of Silver Bow Creek Greenway access features. Incorporating access feature design in the ongoing remedial/restoration design and construction phases will allow access features to be incorporated into the overall floodplain and stream crossing design and engineering process. During the heavy construction work of the ongoing remedial and restoration improvements, access feature construction can take place in an orderly construction sequence and will be protective of remedial and restoration objectives.

Major tasks include:

- Coordinating installation of two box culverts under the Rarus Railway line to accommodate Silver Bow Creek and the Greenway trail;
- Designing and constructing in-stream habitat improvements to accelerate restoration of a self-sustaining fishery;
- Broadening floodplain acreage in the Miles Crossing area; and
- Access feature design and installation in Subarea 3 (est. 3100LF of aggregate trail) and Subarea 4 (est. 4.13 miles of paved trail).

TABLE 1 - DETAILED 2008 GRANT COST ESTIMATE

Area / Item Description	Quantity	Unit	Unit Price	Total	Notes
ACCESS FEATURES					
Subarea 3					
Aggregate Base Course, 14' wide, 6" depth w/fabric	3310	LF	\$13.50	\$44,685.00	Engineers Estimate, MDT Bid Tabulations
Trail Bridge	1	EA	\$90,000.00	\$90,000.00	Engineers Estimate, Manufacturer Quote
Box Culvert 12'x8' Pre Cast RCP Box	1	EA	\$212,000.00	\$212,000.00	Engineers Estimate, Manufacturer Quote
Culverts with end sections	2	EA	\$1,950.00	\$3,900.00	Engineers Estimate, MDT Bid Tabulations
Trailside picnic tables	1	EA	\$3,900.00	\$3,900.00	Engineers Estimate
Trailside benches and pads	1	EA	\$3,200.00	\$3,200.00	Engineers Estimate
Misc. access control signage	0.7	miles	\$5,000.00	\$3,500.00	Engineers Estimate
Trail Entrance Gate	1	EA	\$2,500.00	\$2,500.00	Engineers Estimate
Subtotal				\$363,685.00	
Subarea 4					
Asphalt, 10' wide, 3" thick	21,800	LF	\$22.00	\$479,600.00	Engineers Estimate, MDT Bid Tabulations
Aggregate Base Course, 14' wide, 6" depth w/fabric	21,800	LF	\$13.50	\$294,300.00	Engineers Estimate, MDT Bid Tabulations
Culverts with end sections	11	EA	\$1,950.00	\$21,450.00	Engineers Estimate, MDT Bid Tabulations
Trailside picnic tables	5	EA	\$3,900.00	\$19,500.00	Engineers Estimate
Trailside benches and pads	5	EA	\$3,200.00	\$16,000.00	Engineers Estimate
Misc. access control signage	4.2	miles	\$5,000.00	\$21,000.00	Engineers Estimate
Trail Entrance Gate	5	EA	\$2,500.00	\$12,500.00	Engineers Estimate
Subtotal				\$864,350.00	
ECOLOGICAL AND HABITAT IMPROVEMENTS					
Subarea 3					
Box Culvert 12'x6' Pre Cast RCP Double Box	1	EA	\$206,000.00	\$206,000.00	North Alignment, Under Rarus, Engineers Estimate
Additional Stream Channel Length	4800	LF	\$60.00	\$288,000.00	Based on Confluence Length Estimate
Floodplain regrading	19	Acres	\$2,000.00	\$38,000.00	Engineers Estimate
Subtotal				\$532,000.00	
DESIGN					
Access Features Design (15%)	1	LS	\$184,205.25	\$184,205.25	Investigation, Design, and Construction Oversight
Ecological Features Design (10%)	1	LS	\$53,200.00	\$53,200.00	Includes Coordination Cost Savings
Subtotal				\$237,405.25	
2008 Cost Totals					
Subtotals					
Access Features				\$1,228,035.00	
Ecological and Habitat Improvements				\$532,000.00	
Contingency (5%)				\$88,001.75	
Project Administration and Oversight (5%)				\$88,001.75	GSD costs
Design				\$237,405.25	Percentages provided above
TOTAL 2008 COSTS				\$2,173,443.75	